

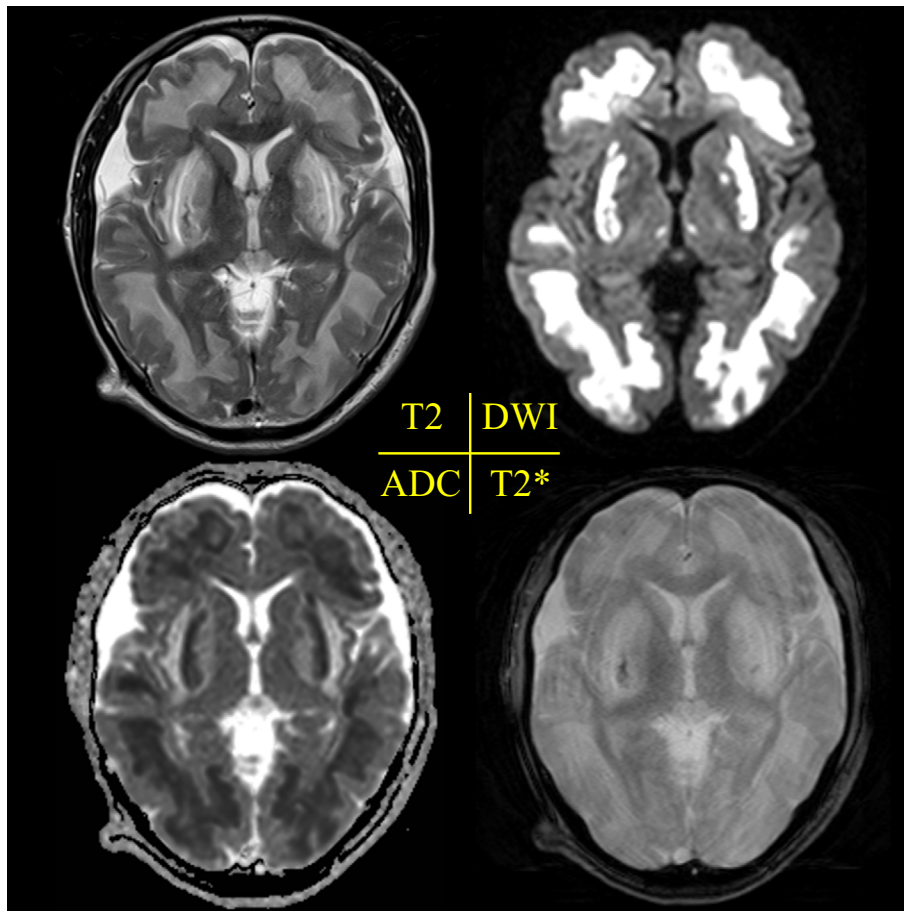
Brain Images in Fatal Methanol Intoxication

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Picture 1.

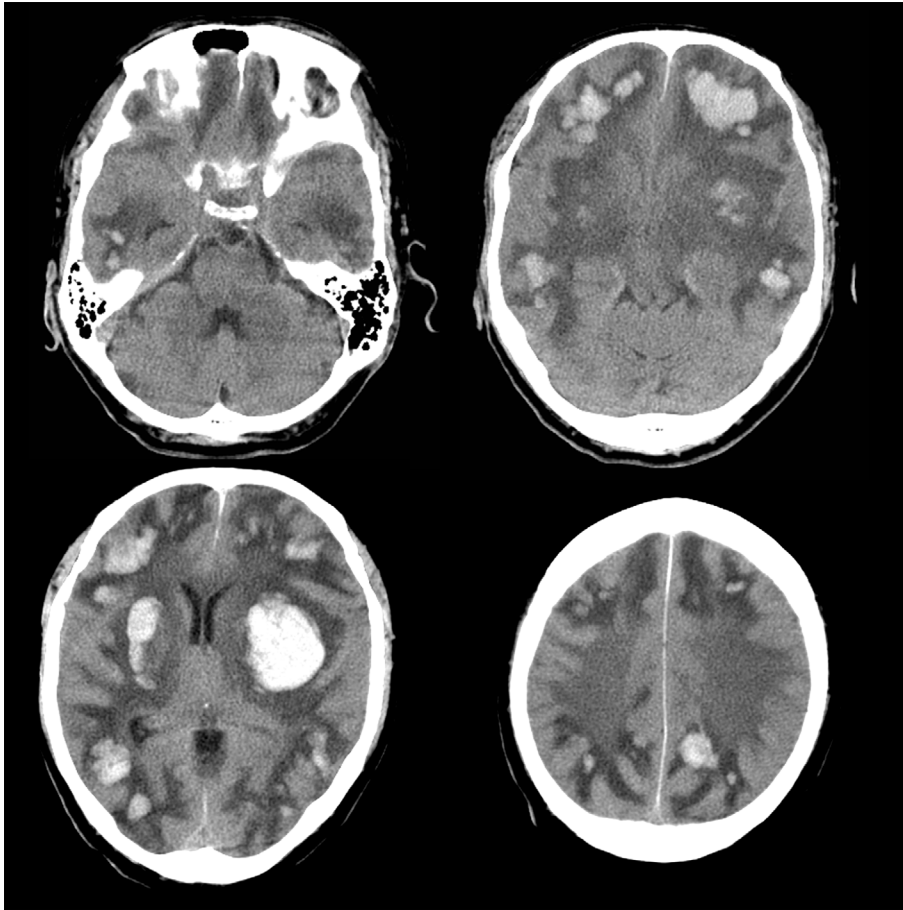
A 64-year-old man with no significant medical history was admitted to the intensive care unit with a progressive visual abnormality and he was also in a coma. Because of a rapid exacerbation of his symptoms and the onset of severe metabolic acidosis, we treated him with fomepizole due to suspected methanol intoxication, however, he never recovered from the coma. An extremely high concentration of

methanol was found in his urine led to a definitive diagnosis of methanol intoxication associated with severe brain damage (1, 2). At five days after admission, diffusion-weighted magnetic resonance imaging (MRI), T2-weighted imaging and apparent diffusion coefficient (ADC) map revealed the symmetric and extensive range of deep white matter damage but sparing the cortex. Furthermore, T2* images suggested a

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Picture 2.

slight hemorrhage in the bilateral putamen (Picture 1). At 10 days after admission, he lost his entire brain-stem reflex. Emergency computed tomography (CT) imaging revealed massive hemorrhaging in the deep white matter as the earlier MRI had indicated (Picture 2). In addition to this, another MRI showed a slight risk of intracranial hemorrhaging. Thereafter, it was impossible to stop the progression of major intracranial hemorrhaging. His vital status, including blood pressure, was stable until the 10th day. He died soon after the last CT examination. Physicians should thus be aware of the possibility of methanol intoxication which causes brain damage and can also induce delayed intracranial hemorrhaging.

The authors state that they have no Conflict of Interest (COI).

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